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OSLER, HOSKIN & HARCOURT LLP (BRP)
2100 - 1000 DE LA GAUCHETIERE ST. WEST
MONTREAL, QC H3B4W5
CANADA

EXAMINER	
BOEHLER, ANNE MARIE M	
ART UNIT	PAPER NUMBER
3611	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipmtl@OSLER.COM

Office Action Summary	Application No.	Applicant(s)	
	09/472,134	GIROUARD ET AL.	
	Examiner	Art Unit	
	Anne Marie M. Boehler	3611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 February 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-49,77-84,87,88 and 90* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-49,77-84,87,88 and 90* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. Claims 1-49, 77-84, 87-88, and 90 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Applicant now claims a "tunnel including at least one piece of bent sheet metal". However, applicant's original disclosure does not refer to a tunnel, but rather simply a "frame". Applicant has also added the phrase "made of bent sheet metal" on page 9, line 19, of the specification, where there was no reference to bent sheet metal previously. Even applicant's Canadian patent application, which he has incorporated by reference, does not describe a piece of bent metal. It shows a frame 10 with a tunnel area 27, but does not indicate it is formed from a bent sheet of metal. In fact, a tunnel could be formed from any number of materials, including plastics and composites. Therefore, the recitation of a tunnel formed from a bent sheet of metal is believed to be new matter and must be removed from the claims and the specification.

DETAILED ACTION

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 40-43, 45-49, 77-82 and 88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasui (USPN 4,848,503) in view of 'The Seated Man (Homo Sedens) The seated work position Theory and Practice" article by A.C. Mandel, hereinafter referred to as "The Article" and Marier (USPN 5,660,245).

With respect to claims 40 and 77, Yasui shows a snowmobile 11 with a frame assembly 12, a seat 14 carried by the frame designed to accommodate a single rider seated in a straddle position (col. 1, line 66-67), a power unit 31 suspended within frame assembly 12 and including an internal combustion engine 32 that is clearly in front of the seat (see figs. 1 and 2), a pair of front skis 16 supported on the forward section of frame assembly 12 and steered by steering shaft 17 and handle bar assembly 18 (steering device) journalled to the frame forward of the seat 14 in a convenient location for operation by the rider 15 (col. 2, lines 49-55), and a driving belt 21 (driving track) positioned beneath the seat 14 and extending rearwardly of it where it circles idler sprockets 22 and 23. The belt extends forwardly to circle driven shaft 29 (forward most drive axle) powered by the engine 32. Yasui shows a rider positioned on the seat of the snowmobile such that his body assumes a particular position, i.e., with the rider straddling the vehicle, hand gripping the steering device such that elbows are substantially over the feet on the footrests/sideboards (footrests/sideboards are not noted by a reference #) and rider's back upright. Please note that applicant has defined the standard position and each of the angular relationships, not relative to a discreet point, but rather between various body parts of the rider. Although the drawings are not

necessarily to scale, they do show relationships of components with respect to other components as well as horizontal and vertical positioning.

In view of this, it is clearly seen in figure 1 that the seat 14 provides a range of seat positions, including the seat position of the rider shown, which is behind and below the steering grip position. Footrests or sideboards (unnumbered) are generally horizontal over a substantial extent and form at least one foot position that is longitudinally between the steering position and the seat position and substantially lower than either the seat or steering position. With respect to the first angle claimed in claim 40, it would be difficult for a rider to position himself in a manner that did not satisfy the broad range if angles recited. The rider position shown in Figure 1 suggests a relatively large angle between a line through the steering position and the seat position and a line through the seat position and the foot position that is definitely within the rather broad range provided in the claim (63-152), a second (less than 90 degree) angle between a line passing through the footrest position and steering position and a line passing through the footrest position and the seat position that is also definitely within the broad range provided in the claim (16-64); and a third smaller (less than 42 degrees) angle between a line passing through the footrest position and the steering position and a line passing through the steering position and the seat position. Thus, the only claimed limitations found in claim 40 and not deemed to be met by Yasui is the use of a "standard rider", i.e. having dimensions and weight of a 50% human male and the rider's torso tilted toward the steering device when in a "standard seating position".

As to the "standard rider", to ensure a large customer base, it would be desirable to have dimensions of a snowmobile be capable of accommodating a large range of intended users (i.e. be it a person of small stature or an average or "standard rider" adult, or a rather tall person) therefore, it would have been obvious to have constructed the snowmobile vehicle with a "standard rider" in mind so as to be comfortable for the majority of "standard" users and to best avail the product largest cross-section of customers. As for the “standard seating position" with the torso tilted toward the steering device, "The Article" broadly teaches that the "ideal" seating position, torso at 90 degrees to the thighs, is not a comfortable seating position for the majority of people. “The Article" further teaches that the seating position that should be considered the new “ideal" position is that in which the torso is tilted forward and the thighs are tilted such that the person's knees are below the hips. This positioning places the least amount of stress on the lower back and hips, thus is very comfortable. (Note particularly the paragraphs bridging pages 20 and 21 directed to Figure 4 a-d, as well as page 26 in the paragraph directed toward "riding". Yasui provides a seat and footrests spanning a significant length of the vehicle that allows the rider to position himself in a number of different seating positions, based upon his comfort level. Thus, as permitted by the reference to Yasui, it is maintained that the seating position is highly dependent upon the rider's comfort level, physical conditioning, length of ride and even skill level of the operator. Such levels and conditioning all vary from one rider to another and are not constant. A rider will specifically choose how he sits with respect to the steering device and other snowmobile components based upon the variable parameters noted above.

Thus it would have been obvious at the time of the invention to one of ordinary skill in the art to have had an operator select a "standard seating position" based upon his own personal preferences with respect to the steering device, seat, and footrests so that the rider is the most comfortable he can be throughout the duration of the entire ride, thus ensuring that he is best able to control the snowmobile.

With respect to claims 41-43 and 78-80 (the slightly more narrowed ranges, as well as the specific angles), although the drawings are not necessarily to scale, the positions shown in Figure 1 would suggest to one of ordinary skill in the art to configure a snowmobile so that the seat position, foot position, and steering position are relatively located with respect to one another for rider comfort since such associated angles will vary as the rider shifts around by moving his feet along the sideboards, moves forward and back along the seat, and changes where the steering handlebar is gripped. Thus, selection of such ranges, as well as specific angles, is dependent on the comfort and safety desired by the operator. It is not specifically evident if the more specific angular relationships --first angle 83 degrees, second angle 64 degrees, and third angle 33 degrees- in claim 43 between the lines connecting the steering position, seat position and foot position is met by Yasui. However, such angularity will depend upon quite a few dimensions and component relationships that will be decided based upon the overall dimensions deemed appropriate for the desired optimum configuration such as for rider comfort and compactness of the device. Therefore, it is maintained that it would have been obvious to one of ordinary skill in the art at the time of the invention to have constructed the snowmobile of Yasui such that the positioning of the average rider

would fulfill the requirements of respective angles are 83 degrees, 64 degrees, and 33 degrees, in order to provide optimum overall dimensions of the device for rider comfort and compactness. Furthermore, it is also maintained that even without a specific effort to dimension the snowmobile of Yasui in this manner, that it would have been obvious for a standard operator to have positioned himself at these specific angles with respect to the vehicle, dependent upon the skill and comfort level of the operator in order to enhance the operators feeling of comfort and vehicle control.

With respect to claims 45 and 82, everything noted structurally above, as well as the previous obviousness statements concerning the standard rider and standard seat position, also applies to the structural limitations present in this claim. Yasui further shows the first angle larger than the third angle. However, it does not show the first angle being 2.5 times the third angle. As previously pointed out, the positions shown in Figure 1 would suggest to one of ordinary skill in the art to configure a snowmobile so that the seat position, foot position, and steering position are relatively located with respect to one another for rider comfort since such associated angles will vary as the rider shifts around by moving his feet along the sideboards, moves forward and back along the seat, and changes where the steering handlebar is gripped. Thus, selection of such angles and angular relationships, is dependent on the comfort and safety desired by the operator. Such angularity and angularity relationship will depend upon quite a few dimensions and component relationships that will be decided based upon the overall dimensions deemed appropriate for the desired optimum configuration such as for rider comfort and compactness of the device. Therefore, it would have been obvious

to one of ordinary skill in the art at the time of the invention to dimension the snowmobile so the angular relationship is the first angle being 2.5 times the third angle to provide optimum overall dimensions of the device for rider comfort and compactness.

With respect to claim 46, everything noted structurally above, as well as the previous obviousness statements concerning the standard rider and standard seat position, also applies to the structural limitations present in this claim. Also, Yasui shows an angle formed between a horizontal line and a line passing through the steering position and the seat position being well within the broad range provided in the claim (15 to 51).

With respect to claims 47-49, (the slightly narrowed ranges, as well as the specific angles), although the drawings are not necessarily to scale, the positions shown in Figure 1 would suggest to one of ordinary skill in the art to configure a snowmobile so that the seat position, foot position, and steering position are relatively located with respect to one another for rider comfort since such associated angles will vary as the rider shifts around by moving his feet along the sideboards, moves forward and back along the seat, and changes where the steering handlebar is gripped. Thus, selection of such ranges, as well as specific angles, is dependent on the comfort and safety desired by the operator. It is not specifically evident if the more specific angular relationship -- the angle in question being 26 degrees-- in claim 49 between a horizontal line and a line passing through the steering position and the seat position is met by Yasui. However, such angularity will depend upon quite a few dimensions and component relationships that will be decided based upon the overall dimensions deemed appropriate for the

desired optimum configuration such as for rider comfort and compactness of the device. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to dimension the snowmobile so the respective angle is 26 degrees to provide optimum overall dimensions of the device for rider comfort and compactness.

Yasui fails to teach a tunnel formed from bent sheet metal.

Marier sows a snowmobile with a rear tunnel section 12 with a horizontal top 27 and vertical sides 26 formed from a sheet of aluminum.

It would have been obvious to one of ordinary skill in the art to form the rear tunnel structure of Yasui from aluminum sheeting, as taught by Marier, in order to provide a high strength, light weight barrier between the track and the rider.

4. Claim 83 is rejected under 35 U.S.C. 1O3(a) as being unpatentable over Yasui, “the Article” and Marier as applied to claims 77-82 above, and further in view of Stacy (USPN 3,692,130).

Yasui lacks left and right toe-holds.

Stacy teaches the use of toe-holds 33 on the left and right sideboards of a snowmobile.

It would have been obvious to one of ordinary skill in the art to provide the Yasui snowmobile with toe-holds at the front and of the footboards, as taught by Stacy, in order to provide the user better ability to grip the vehicle.

5. Claims 6-39, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasui in view of applicant's admitted prior art (AAPA) and Marrier.

With respect to claims 6 and 16, Yasui shows a snowmobile 11 with a frame assembly 12, a seat 14 carried by the frame designed to accommodate a single rider seated in a straddle position (col. 1, line 66-67), a power unit 31 suspended within frame assembly 12 and including an internal combustion engine 32 that is clearly in front of the seat (see figs. 1 and 2), a pair of front skis 16 supported on the forward section of frame assembly 12 and steered by steering shaft 17 and handle bar assembly 18 (steering device) journalled to the frame forward of the seat 14 in a convenient location for operation by the rider 15 (col. 2, lines 49-55) , and a driving belt 21 (driving track) positioned beneath the seat 14 and extending rearwardly of it where it circles idler sprockets 22 and 23. The belt extends forwardly to circle driven shaft 29 (forward most drive axle) powered by the engine 32. Yasui shows a rider positioned on the seat of the snowmobile such that his body assumes a particular position, i.e., with the rider straddling the vehicle, hands gripping the steering device such that elbows are substantially over the feet on the footrests/sideboards (footrests/sideboards are not noted by a reference #) and rider's back upright. Yasui is silent regarding the use of a "standard rider" and the position of the centers of gravity of the snowmobile and rider.

As to the "standard rider", to ensure a large customer base, it would be desirable to have dimensions of a snowmobile be capable of accommodating a large range of intended users (i.e. be it a small child or a "standard ride/'adult, or a rather tall adult) therefore, it would have been obvious to have constructed the snowmobile vehicle with a "standard rider" in mind so as to be comfortable for the majority of "standard" users to avail the largest cross-section of customers.

As to the centers of gravity, according to AAPA, the center of gravity of prior art snowmobiles and his own is generally located at or near the drive sprocket (see applicant's disclosure page 8, lines 9-10). Applicant also indicates that the rider's center of gravity, in a standard position, is just forward of his stomach, set off from the center of the rider's torso (see applicant's disclosure page 8, lines 4-7). Applicant has also defined the various dimensions of the standard rider in Figures 19 and 20. Those dimensions are understood to be applicant admitted prior art. The angle between a line connecting the center of gravity of the rider and the center of gravity of the snowmobile relative to horizontal appears to be well within the ranges claimed. Claim 6 recites the extremely broad range of 35 degrees to 90 degrees from horizontal, which covers all angles within a 55 degree range. The center of gravity of the combined snowmobile and rider will also fall on the line connecting the two centers of gravity. Therefore, the line through the combined rider/snowmobile c.o.g. would have the same angle relative to horizontal and fall within the broad ranges claimed.

With respect to claims 7-9 and 17-19, (the slightly narrowed ranges, as well as the specific angles), although the drawings are not necessarily to scale, the positions shown in Figure 1 would suggest to one of ordinary skill in the art to configure a snowmobile so that the seat position, foot position, and steering position are relatively located with respect to one another for rider comfort since such associated angles will vary as the rider shifts around by moving his feet along the sideboards, moves forward and back along the seat, and changes where the steering handlebar is gripped. Thus, selection of such ranges, as well as specific angles, is dependent on the comfort and

safety desired by the operator. It is not specifically evident if the more specific angular relationship --the angle in question being 67 degrees-- in claim 9 is met by Yasui. However, such angularity will depend upon quite a few dimensions and component relationships that will be decided based upon the overall dimensions deemed appropriate for the desired optimum configuration such as for rider comfort and compactness of the device. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to dimension the snowmobile so the respective angle is 9 degrees to provide optimum overall dimensions of the device for rider safety, comfort and compactness.

With respect to claims 10-15, everything noted structurally above, as well as the previous obvious statements concerning the standard rider, also applies to the structural limitations present in this claim. Yasui clearly shows a rider positioned behind and at a higher elevation than the forward drive sprocket, but spaced forward of the rearward most end of the snowmobile. The distance between the center of gravity of the rider (just in front of the rider's stomach) and the center of gravity of the snowmobile (approximately at the drive sprocket) is approximately the distance between the rider's elbow to his fingertips. According to applicant's diagram of a standard rider, the distance from the rider's elbow to his fingertips is approximately 43.5 cm (forearm plus hand length: 25.4 + 18.1cm) or within the range of 41-50 cm (taken from the outer ranges described in Figure 19). Therefore, according to AAPA'S description of the standard rider, and centers of gravity of the rider and prior art snowmobile, for a standard rider in a standard position, it would have been obvious to make the distance between the

center of gravity of the rider and the forward drive axle of the Yasui snowmobile about the distance from the rider's elbow to his fingertips. This length is clearly within the ranges recited. As for the specific distance of 40 cm, a skilled artisan would then select a particular distance based upon the desired rider comfort and safety. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to dimension the snowmobile so that the drive of the snowmobile is spaced from the center of gravity of the rider a specific distance of 40 cm in order to provide rider comfort and safety.

Regarding claim 44, the distance between the seat position and steering position shown is approximately the length of the rider's thigh. According to applicant's description of the standard rider, the thigh of a standard rider is 42.4 cm (or between 38.9 and 46 cm). It would have been obvious to one of ordinary skill in the art to dimension the Yasui snowmobile so that the distance between the seat position and steering position is within the broad range of 40-90cm, as recited in claim 44. It would also have been obvious to select particular ranges and specific dimensions, including a distance between the seat position and the steering position of approximately 42cm, as suggested by Yasui's Figure 1 and applicant's definition of the standard rider, in order to dimension the snowmobile for a standard rider and accommodate the rider's comfort and safety needs.

Yasui also fails to teach a tunnel formed from bent sheet metal.

Marier sows a snowmobile with a rear tunnel section 12 with a horizontal top 27 and vertical sides 26 formed from a sheet of aluminum.

It would have been obvious to one of ordinary skill in the art to form the rear tunnel structure of Yasui from aluminum sheeting, as taught by Marier, in order to provide a high strength, light weight barrier between the track and the rider.

6. Claims 1-5, 84, 87, and 88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasui (4,848,503) in view of AAPA, Marrier, and "The Complete Snowmobile Handbook", published 1974.

Yasui fails to teach the exact horizontal position of the center of gravity of the vehicle without the rider relative to the center of gravity of the vehicle with the rider, as recited in claims 1-5. However, as discussed above, it would have been obvious to one of ordinary skill in the art to position the center of gravity of the rider on the Yasui vehicle at approximately 43cm from the center of gravity of the vehicle. The Complete Snowmobile Handbook" describes snowmobile ranging in weight from 280 to 15381b. An average of these would be approximately 900. Taking the vehicle weight as 900lb., given that standard rider is 170lb, and the distance between the rider c.g. and the vehicle c.g. is approximately 43 cm, a simple calculation places the combined c.g. at X=(1/1070)170(43cm)=6.8cm from the c.g. of the vehicle. Therefore, it would have been obvious to one of ordinary skill in the art to construct a snowmobile with the features taught by Yasui at a weight of approximately 900lbs., as suggested by "The Complete Snowmobile Handbook", with a center of gravity of the vehicle at approximately 7cm from the center of gravity of the rider and vehicle, as determined above, in order to size the Yasui snowmobile for the standard rider.

Regarding claim 5, Yasui also shows the seat to have a significant length relative to the overall length of the vehicle. It would have been obvious to position the rider at any number of standard positions along the length of the vehicle, including at a position forward of that shown, which would result in center of gravity of the vehicle and rider being at only 5 cm from the center of gravity of the vehicle, in order to position the rider more forward which is a better position when in anticipation of rougher terrain.

Yasui fails to teach a tunnel formed from bent sheet metal.

Marier shows a snowmobile with a rear tunnel section 12 with a horizontal top 27 and vertical sides 26 formed from a sheet of aluminum.

It would have been obvious to one of ordinary skill in the art to form the rear tunnel structure of Yasui from aluminum sheeting, as taught by Marier, in order to provide a high strength, light weight barrier between the track and the rider.

8. Applicant's arguments filed February 2, 2009 have been fully considered but they are not persuasive.

As stated previously, the examiner cannot find support in applicant's original disclosure for the claim language, as currently amended. In particular, the disclosure does not provide support for a frame including a tunnel including a bent sheet of metal. Applicant has also failed to point out specific places in his specification, including the detailed description, background of the invention, or drawings, that provide such support. He has improperly added new matter, with an amendment in the February 2, 2009 response, by inserting a recitation of a "bent sheet metal" to the specification.

Applicant's affidavit submitted October 09, 2007, and executed by Jean-Yves Leblanc, indicates the construction of the disclosed structure would "inevitably be made of sheet metal", but still fails to identify the teaching in the present disclosure for such a construction. The fact that such structure is abundantly obvious in view of conventional methods of manufacturing snowmobiles does not mean there is support in applicant's disclosure for such structure to be claimed. The affidavit and arguments have not shown that such structure is inherent to applicant's disclosed invention or required in every instance. Just because "conventional" snowmobiles are made with bent metal and that applicant knows of no snowmobile that is made from any other material does not mean it is inherent. Presumably, applicant's invention is not a "conventional" snowmobile and, therefore, does not conform to such structure. Therefore, the affidavit and remarks do not overcome the new matter rejection under 35 U.S.C. 112, first paragraph.

As indicated previously, applicant's original disclosure conspicuously lacks any description of the tunnel area. It also fails to teach the material used to form that area. Modern composites can be as strong as and lighter in weight than conventionally used metals. Such composites are routinely used in the manufacture of structural elements formerly made from metal in bicycles, automobiles, aircraft, etc. There is nothing inherent to snowmobiles that would not allow composites to be used in the manufacture of their frames. Applicant's tunnel is not inherently made from bent sheet metal. Therefore, without a specific teaching, applicant's disclosed invention does not teach a bent sheet metal tunnel.

Applicant indicates that the examiner has provided no teaching that a material other than steel was used in snowmobile frames at the time of applicant's invention. While the examiner maintains that it was applicant's duty to provide a full disclosure of his invention rather than relying on inherency, the examiner can provide evidence that forming a snowmobile tunnel from bent sheet metal is not inherent. Yasui (USPN 4,779,695) teaches, in column 3, lines 11-17, a snowmobile body fabricated from "aluminum, fiberglass, or other suitable plastic" and the body includes a "tunnel". Smith (USPN 4,893,692) shows a snowmobile of a typical or "conventional" configuration where the body and frame, including the tunnel portion 17 with side plates 74, 76, are made from a molded glass reinforced polyester laminate skin S with a foam core C, not bent metal. Hebert (USPN 3,534,701) shows a snowmobile with a tunnel 13 of frame 12 made from glass fibre material. Asoa (USPN 5,791,431), for example, teaches forming a vehicular frame, including snowmobile frames, out of known materials. It indicates steel is preferred, but other materials, such as fiberglass or composites could be used. Therefore, the examiner has provided a number of references teaching snowmobile frames and tunnels made from materials other than bent sheet metal. Therefore, the use of bent sheet metal in the construction of snowmobile tunnels cannot be inherent and is not taught in applicant's original disclosure.

Applicant argues that Yasui teaches away from using a heavy stamped steel tunnel structure and, therefore, teaches away from using a tunnel made from bent sheet metal. Marrier, however, teaches a light weight tunnel structure made from bent aluminum. Yasui specifically refers to "steel stampings" (col. 1, lines 17-18). The

teaching in Marrier is not of a heavy stamped steel and, therefore, is not the structure taught away from in Yasui. Yasui promotes the concept of a light-weight tubular framework, but does not eliminate the possibility of the use of some bent metal sheet material in construction of the tunnel area, for reinforcement or to channel snow and prevent it jamming between the track and the frame. Applicant has made it abundantly clear through arguments and the affidavit that such a tunnel structure is highly advantageous and commonly used in the manufacture of snowmobiles. Also, applicant's remarks include a clarification that the tunnel, as claimed, need not be made entirely from one sheet of metal, but rather need only incorporate one element of bent sheet metal. It appears that Yasui includes a number of bent sheet metal elements in the frame, including a cross piece connecting sides of element 24 (seen in Figure 2), pads 21, and channel member 26. Therefore, the examiner maintains that it would have been obvious to make the tunnel of Yasui with at least one piece of bent sheet metal in view of the teaching of Yasui in combination with any number of additional references, as indicated above.

Applicant argues that the teaching of Mandal is not combinable with that of Yasui because snowmobile designers need to allow for the rider to stand up and travel over uneven terrain. The examiner disagrees. Mandal discusses comfortable seating positions on stationary seats as well as while straddling a horse while riding (see p. 26 or Mandal). It provides basic teachings regarding human physiology and ergonomic seating design. While additional considerations may be taken into account when

designing a snowmobile, the teachings of basic comfort in sitting positions, taught by Mandal, are applicable to snowmobiles as well.

Applicant argues that the teachings of Yasui are not combinable with conventional snowmobile designs. However, applicant fails to distinguish the Yasui design from what is "conventional". The Yasui vehicle may be somewhat small in scale but it includes all of the standard features of a snowmobile, including two front skis, a forwardly mounted engine, a rear mounted track, a straddle seat in a central area, etc. The examiner maintains that the Yasui design contains all of the basic features of what is generally understood to be a "conventional" with the basic snowmobile components conventionally positioned and lends itself readily to combination with teachings from other snowmobile designs.

Applicant argues that the examiner incorrectly situates the c.g. position of Yasui and that Yasui does not weigh 900 pounds. Applicant has indicated that snowmobiles in model year 2000 were closer to 600 to 700 pounds in weight. However, the Yasui reference was filed in 1988, not 2000. Presumably, some advancement in efficiency was achieved between 1988 and 2000. Weight reduction has long been an objective in vehicle design, for a number of reasons, including fuel efficiency, maneuverability and cost savings through reduction in materials used. Also, even if the weight of the snowmobile were taken to be, for example, 600 pounds, the cg position, according to the analysis above would still be on the order of 9 to 10 cm, which is close to the 7cm mark claimed. Again, the examiner has relied on the suggestions of the prior art for estimations as to the positioning of the centers of gravity. The prior art of record

suggests that the c.g. positioning claimed is obvious. Therefore, the rejections are being maintained.

Applicant submitted on February 2, 2009, a Declaration by Jean-Yves Leblanc and a number of exhibits, as evidence of long-felt need, failure of others, skepticism of experts, commercial success, and copying by others. While applicant has provided a large number of articles and brochures, the evidence lacks the requisite nexus between the claimed invention and the subject matter discussed in the various articles. It appears from this evidence that applicant's REV series of snowmobiles has been well received by some in the industry. There is reference to moving the rider forward and centralizing the frame as features that have provided good results. However, the descriptions of the improvements are so vague that it is not clear what structural change is achieving the result. While some of the articles refer to the rider position moving forward, none discuss exactly where the rider position ends up. Also, it is not clear how other factors, such as track and ski suspensions factor into the improvement. There is a lot of discussion in these articles about improvements in suspension and chassis designs and how they work together. Applicant's disclosed invention has nothing to do with suspension design and little or nothing to do with the chassis configuration. In fact, applicant has gone to great lengths to argue that his chassis is a "conventional" design having a tunnel made from bent sheet metal. From applicant's detailed description and drawings, it appears that applicant's design has not significantly reconfigured the chassis or moved the center of gravity of the vehicle, but rather moved the steering position forward so as to urge the rider to sit forward on the seat (a seat which, too,

appears to be configured in the same way as the "conventional" snowmobile). Therefore, it is not at all clear from this evidence that the claimed subject matter is what is achieving the desired results.

It is noted that the articles are all dated from 2002 on, while applicant's application claims priority back to 1998. Also, applicant's disclosure is not specific as to the structure that goes into carrying out the design. It is not clear how much of applicant's success is attributable to the basic concepts disclosed in the present application verses various improvements developed since that time. In para [0084] of the declaration, one reviewer is quoted as saying "first year prototypes were unimpressive", while later production units were extremely good. This suggests that the improved ride is attributable to much more than the position of the rider.

The evidence of commercial success is also not conclusive. Applicant put considerable resources into advertising and some increase in sales is expected each year. There is not a clear nexus between sales and the elements of applicant's invention that are presently being claimed.

It is also not clear that others are copying applicant's design. The description of the Polaris machines that followed applicant's launch of the REV series still emphasizes suspension and chassis components that are not part of applicant's claimed invention. Even the use of a rider-forward design is linked to a movable steering handle, which is a feature not suggested in applicant's application. Therefore, the connection between developments made by the competition and applicant's concepts are not clear.

Therefore, the declaration and evidence provide have not overcome the rejections as set forth above.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne Marie M. Boehler whose telephone number is 571-272-6641. The examiner can normally be reached on 7:30-5:00, Monday-Thursday, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley Morris can be reached on 571-272-6612. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Anne Marie M Boehler/
Primary Examiner, Art Unit 3611

Anne Marie M Boehler
Primary Examiner
Art Unit 3611